

1           1.    An apparatus for encapsulating a circuit on a  
2 circuit board, comprising:

3               a first mold section configured to close on one  
4 side of the board, the first mold section having an exposed  
5 first conduit;

6               a second mold section configured to close on  
7 another side of the board, the second mold section having a  
8 second conduit for pushing molding compound into a mold  
9 cavity in at least one of the mold sections, the second  
10 conduit having a side opened to the first mold section when  
11 the first and section mold sections are closed on the board;  
12 and

13              a piston slidably mounted inside the first  
14 conduit and configured to extend toward the second mold  
15 section to close the side of the second conduit.

1           2.    The apparatus of claim 1 wherein the board  
2 includes a portion that extends over the side of the second  
3 conduit, and wherein the piston is configured to crush the  
4 portion of the board.

1           3.    The apparatus of claim 2 wherein the piston has  
2 a face configured to close the side of the second conduit  
3 and a rim extending from the face and configured to crush  
4 the portion of the board.

1           4.    The apparatus of claim 3 wherein the rim is  
2 arcuate.

1           5.    The apparatus of claim 2 wherein the second  
2 mold section has a depression for receiving the board, and  
3 wherein the piston has a knife extending from a face and  
4 configured to exert force on the board to seat the board  
5 against an end stop of the depression when the piston  
6 contacts the portion of the board.

1           6.    The apparatus of claim 5 wherein the depression  
2 has another knife configured to exert force on the board to  
3 seat the board in the depression when the piston contacts  
4 the portion of the board.

1           7.    The apparatus of claim 6 wherein the another  
2 knife is asymmetric.

1           8.    The apparatus of claim 5 wherein the knife is  
2 asymmetric.

1           9.    The apparatus of claim 2 wherein the second  
2 mold section has a depression for receiving the board, and  
3 wherein the depression has a knife extending from the  
4 depression and configured to exert force on the board to  
5 seat the board in the depression when the piston contacts  
6 the portion of the board.

1           10.   The apparatus of claim 9 wherein the knife is  
2 asymmetric.

1 11. A method for encapsulating a circuit on a  
2 circuit board, comprising:  
3 closing a first mold section on one side of the  
4 board, the first mold section having an exposed first  
5 conduit;  
6 closing a second mold section on another side  
7 of the board, the second mold section having a second  
8 conduit for pushing molding compound into a mold cavity in  
9 at least one of the mold sections, the second conduit having  
10 a side opened to the first mold section when the first and  
11 section mold sections are closed on the circuit board; and  
12 extending a piston through the first conduit to  
13 close the side of the second conduit.

1 12. The method of claim 11, wherein the board  
2 partially extends over the side of the second circuit,  
3 further comprising:  
4 crushing a portion of the board extending over  
5 the side of the second conduit.

1 13. The method of claim 11, further comprising:  
2 using the piston to exert lateral forces on the  
3 board to seat the board within the second mold section.